

3G Interception

3G-CAT

Interception, Localization and Selective Jamming of 3G (UMTS, WCDMA) Phones

Number of 3G subscribers in the world is growing up rapidly. Defense and security market demands from producers of off-the-air interception systems solutions for 3G phones and their call remains unanswered.

Most popular method used for interception of 3G communications is by using 3G JAMMERS combined with GSM interception systems. The jammers block the 3G channels and 3G phones are forced to migrate to 2G-mode where they can be intercepted. However, this method has suffers from disadvantages:

1. High power 3G jammers disrupt normal work of 3G networks and it can be easily detected.
2. For interception of a single target, all "innocent" 3G phones in the vicinity of the target are pushed to change into 2G mode.
3. 3G jammer has to be used continually; if it stops operating, 3G phones will return to 3G mode and interception will be eliminated.

Those limitations make usage of such method undesirable and in many cases impossible. The 3G-CAT introduced by Ability is a unique, advanced, state of the art device that overcomes the above limitations with additional meaningful capabilities.



3G Interception

System main capabilities:

- Multi Network Coverage - automatic detection of 3G networks in all frequency bands.
- IMSI/IMEI/TMSI Catching - detection of all 3G phones and their identities (IMSI, IMEI and TMSI) for the networks of interest.
- Extended Mobile Parameters - detection of additional parameters such as model of mobile phones and country of origin.
- Mobile location - distance to 3G phones is presented with accuracy of less than 30m.
- Force into 2G-Mode - 3G-Cat forces only selected 3G phones into 2G-mode for interception by other 2G systems. Once forced 3G Phones will remain in 2G-mode forever until reboot. This unique feature makes possible and convenient interception of 3G phones by passive and active 2G interception systems.
- Selective "Blocking" - 3G-Cat can completely block selected 3G phones. Such phones will not be able to communicate in all networks including 3G and 2G.
- Selective "Jamming" - 3G-Cat can efficiently work as an intellectual 3G jammer and jam all 3G phones in only selected networks.

3G-CAT can be used either as a stand-alone device or integrated with Ability's IBIS, GTReS or AGIS systems. It can also be integrated with GSM interception systems of other vendors.

Main specifications:

- | | |
|--|--------------------------------------|
| • Number of received networks | Not Limited |
| • Number of received mobiles | Not Limited |
| • Operating frequency | 3 frequency bands |
| • Modes of operation | Random / Target |
| • Jamming capability | Specific targets or specific network |
| • Maximum Output power | Typical up to 10w |
| • Power supply | 115/230 V AC or 12 V DC |
| • Optional built in batteries for transportable / man-pack operation | |

Advance **GSM** Active Solution

IBIS - II In Between Interception System 2nd Generation

The IBIS-II is the most advanced and newest GSM interception system in the market. The system was designed and developed according to the vast experience gathered in the last 10 years, while deploying worldwide hundreds of GSM interception systems, listening to customer's feedback and analyzing customer's operational requirements.

The IBIS-II is an advanced integrated active solution that includes all relevant sub systems in a single unit, allows the user to scan, analyze, intercept, monitor, record and track GSM mobiles, regardless if they are encrypted by A5.1 or A5.2 encryption (monitoring is not done by forcing the mobile to use A5.0 or A5.2 but rather by an integrated deciphering capability).

The IBIS-II is a stand-alone solution for off the air interrogation / interception / monitoring / deception of tactical GSM communication, in a seamless way, without any cooperation with the network provider.

The IBIS-II is restricted for Law Enforcement Agencies and Authorized Governmental Agencies and it offers them a powerful tool to intercept and track GSM communication of all types.



Advance GSM Active Solution

The IBIS-II extracts easily and in short time the mobiles ID's such as IMEI, IMSI & TMSI and allows the user in no time to identify his target mobiles and to monitor them. The IBIS-II offers a complete set of capabilities and advance features to allow the user to control the GSM environment and GSM communication. The user can control the level of service to the target mobiles, selectively Jam specific mobiles, perform silent calls, call or SMS on behalf of target mobile, change SMS messages "on the fly", detect change of SIM card or change of handset, and support Direction Finding system and many additional operational features.

The IBIS-II main capabilities:

- **All GSM in One Single Unit** – the IBIS-II includes all required modules for dual band simultaneous interception in A5.2 and A5.1 environment. No need for any additional hardware.
- **Instant Set Up Time** – without need for external modules, setup is within few minutes only.
- **Dual Band Solution** – any of the required frequencies 850, 900, 1800, 1900MHz.
- **Real Time Interception** – for voice and SMS, Incoming and Outgoing, in A5.1 and A5.2 networks.
- **Semi Passive** - Invisible & undetectable operation, no need for cooperation with network providers.
- **Data Extracting** – system detects mobile identities including IMSI, IMEI, TMSI, MSISDN (phone number), Kc etc.
- **Presence verification** – user can detect presence of specific target mobile.
- **Concurrent Calls** – system Intercepts up to 6 concurrent duplex calls by default.
- **Selective jamming of communication** – user can block communication of GSM phones defined as targets or specific network service (voice, SMS).
- **Direction Finding Support** – by using silent call, target mobile is activated and can be traced by external DF / Homing system.
- **Manipulation** – user can make fake calls and send fake SMS to / from target.
- **Remote Control** – IBIS-II can be operated locally by the system laptop, by LAN connection and remote laptop or via WiFi, by a remote laptop.

System can operate with variety of power sources such as AC supply, batteries, car supply etc and by that, it can be installed and operated in many types of applications and environments (fixed installation, remote control configuration, transportable, vehicular, man pack).